



Attorney Docket No. 077128-0122

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

William J. Mertz, Danny Charles Thompson, Katherine  
Yiu-Kit Leung

Application No.: 10/657,394

Confirmation No.: 9357

Filed On: September 8, 2003

Examiner: Margaret G. Moore

Art Unit: 1712

For: RELEASE LINERS AND PROCESS FOR  
MAKING THE SAME

**DECLARATION OF DANNY CHARLES THOMPSON PURSUANT TO 37 CFR 1.132**

MAIL STOP AMENDMENT

Commissioner For Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

I, Danny Charles Thompson, hereby declare as follows:

1. I am Manager-Product Development with Loparex, Inc., the assignee of the present patent application. Loparex, Inc. is the largest commercial supplier of siliconized release papers and films, I am also one of the inventors in the present application.

2. My formal education includes a Master of Chemical Engineering degree from Virginia Tech in 1986.

3. I have over twenty-two (22) years of experience in the field of chemical coatings with emphasis on polymer chemistry and silicone chemistry. As the Manager of Product Development, my primary responsibilities include overseeing new product development projects for specific customer applications.

4. In my present position and throughout my career, I have conducted and supervised research in the development of new products in the silicone release liner area. In addition, I hire, train and supervise other engineers working in the field of silicone release liner research and development. Accordingly, I have a good understanding of the level of skill and knowledge possessed by those of ordinary skill in the art of silicone release liner technology.

5. I have reviewed and am familiar with U.S. Patent No. 5,576,356 to Leir et al. The Leir patent is being cited in the present office Action mailed November 8, 2006, to reject claims 1-11 are being anticipated by or in the alternative, obvious over the Leir patent.

6. During a meeting on January 31, 2007 with Examiner Margaret Moore, we discussed the differences of the present composition to that disclosed in the Leir patent. It was suggested additional data be provided for the composition of Sample E the control from Example 6 disclosed in the present application.

7. Below is the silicone formulation for Sample E:

GE UV9300C Silicone polymer – 48.5 parts

GE UV9400 Silicone polymer – 48.5 parts

GE UV9380C UV Photoinitiator – 2 parts

Witco A-186 Trimethoxysilane – 1 part

This formulation is similar to that found in the Leir patent, which contains UV9300C and UV9310C. UV9310C and UV9380C are almost identical in composition.

8. As one of ordinary skill in the art, it is my opinion that the composition of Leir cannot result on the same product with the extremely low levels of volatiles as in the present invention. The passive evaporation without heat as disclosed in Leir does not inherently result in a volatile free coating. Example 6 in the present application provides an analysis of the volatile content by outgassing, wherein the main component is siloxanes. The release liners of the present invention have a 1/10 as much outgassing material as a release liner prepared using a UV cure silicone system applied without active heating and evaporation. As illustrated in Example 6 of the present application, the total siloxanes listed in sample C is 57 nanograms/square centimeter, while Sample D lists the total siloxanes as 32 nanogram/square centimeter. Both of these samples were prepared with heating. The resulting total siloxane values listed in Samples C and D can be contrasted to the control Sample E, which has the same composition as in Leir, wherein the total siloxanes are measured at 474 nanograms/square centimeter. Thus, Leir does not provide for the same low level of volatiles as in the present invention.

9. Similarly, it is also my opinion that the composition of Leir cannot result in the same product with extremely low levels of extractables as the present invention. We can compare the formulas in Example 6 in a similar manner for extractables. For Sample C, one example of our invention, extractables were 0.24 micrograms per square centimeter. For Sample E, extractables were 2.6 micrograms per square centimeter.

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10. Based on the above facts, it is my opinion that Leir does not disclose, teach or suggest a release liner comprising a radiation curable release coating in an organic solvent coated onto a surface of a substrate having unexpected and significantly reduced amounts of extractables. Furthermore, it is my opinion that Leir does not disclose, teach or suggest that the resultant coating has no more than about 1.5 micrograms per square centimeter total extractables. There is not experimental evidence in Leir et al. that the level of extractables in the Leir et al. product is the same or less than in the present product. Therefore, it is not inherent that Leir et al. discloses the product with the same properties, such as low levels of extractables, as in the present invention.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that there statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued therefrom.

Respectfully submitted,

Date: February 6, 2007

By: Danny C. Thompson  
Danny Charles Thompson 6 February 2007